

CLAIM AMENDMENTS

1.(Currently Amended) A method for packaging articles with a thin, flexible film of plastic material comprising the following steps:

- providing a protective plastic film wound onto a bobbin;
- drawing the plastic film from the bobbin to form a band of plastic film;
- continuously feeding the band of plastic film (6) along a vertical path defined between deflecting rollers and towards to a conveying means (5),
- applying at least one strip of glue (18) along a longitudinal edge of said band of plastic film (6) during the feeding of the band along the vertical path towards the conveying means, ~~to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart onto the band;~~

- applying at least one series of zones of glue (19), regularly spaced apart, crosswise to said band of plastic film (6) during the feeding of the band along the vertical path towards the conveying means, to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart on the band;

- after the application of the glue, continuously feeding the band of plastic film with the glue applied to the conveying means;

- orderly transferring a series of articles (2) to be packaged to said conveying means (5), above said band of plastic film (6) with the glue applied which is continuously supplied to the conveying means (5), respectively in positions delimited between said transversal zones of glue (19);

- folding longitudinal edges of said band of plastic film (6) over said articles to assume a tubular form around the articles (2) being packaged, overlapping said longitudinal edges of said band of plastic film (6), with said longitudinal strip of glue (18) remaining between said opposite edges of the band (6);

- joining said edges of the band of plastic film (6) along said longitudinal strip of glue (18) and joining said transversal zones of glue (19);
- pressing said overlapped longitudinal edges of the band in correspondence of the longitudinal strip of glue for stabilizing the longitudinal joining of the longitudinal edges;
- pressing over the side portions (19A, 19B) of the transversal zones of glue (19) for stabilizing the crosswise joining of the side portions (19A, 19B) and, at the same time said side portions (19A, 19B) are being so pressed,
- crosswise cutting an area of said band of plastic film (6) situated between the pressed side portions (19A, 19B) of the transversal zones of glue (19), in order to cut the thin, flexible film without forming wrinkles and thereby to obtain single packages of articles (2).

2.(Original) A method as claimed in claim 1, characterized in that said longitudinal strip of glue (18) and said transversal zones of glue (19) are applied to the same side of said band of plastic film (6).

3.(Previously Presented) A method as claimed in claim 2, characterized in that said longitudinal strip of glue (18) and said transversal zones of glue (19) are applied to a side of said band of plastic film (6), which is to be turned to an inside of the package of articles (2).

4.(Original) A method as claimed in claim 1, characterized in that said longitudinal strip of glue (18) is applied continuously along one of said longitudinal edges of said band of plastic film (6).

5.(Original) A method as claimed in claim 1, characterized in that said longitudinal strip of glue (18) and said transversal zones of glue (19) are applied to said band of plastic film (6) in a station (C) situated upstream of an area, where the articles (2) to be packaged enter said conveying means (5).

6. (Currently Amended-Withdrawn) An apparatus for packaging articles with a thin, flexible film of plastic material, characterized in that it includes:

conveying means (5), on which a band of plastic film (6) is fed continuously;

a glue application station (C), where a suitable glue is applied;

first glue applying means (8), located at said glue application station for applying at least one strip of glue (18) along a longitudinal edge of said band of plastic film (6);

second glue applying means (9), located at said glue application station for applying at least one series of crosswise zones of glue (19), regularly spaced apart to the band of plastic film (6), to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart on the band;

stationary folding means (10) for folding longitudinal edges of said band of plastic film (6) over said articles to assume tubular form around the articles (2) being packaged and moving along the conveying means (5), with the longitudinal edges of said band of plastic film (6) overlapped so that said longitudinal strip of glue (18) remains between said opposite longitudinal edges of the band (6);

pressing over the side portions (19A, 19B) of the transversal zones of glue (19),

pressing means (11,13) for stabilizing a joining of said longitudinal edges of said band of plastic film (6) along said longitudinal strip of glue (18) and for pressing over the side portions (19A, 19B) of said transversal zones of glue (19) for stabilizing the crosswise joining of the side portions (19A, 19B);

means (12) for crosswise cutting an area of said band of plastic film (6) ~~at portions located~~ situated between the pressed side portions (19A, 19B) of the transversal zones of glue (19), at the same time said side portions (19A, 19B) are being so pressed, in order to cut the thin, flexible film without forming wrinkles and thereby to obtain single packages of articles (2).

7.(Withdrawn) An apparatus as claimed in claim 6, characterized in that said means for crosswise cutting said band of plastic film (6) include a pair of counter-rotating rollers (13A, 13B), at least one of which carries a radial blade (50), and two presser elements (60A, 60B), situated on both sides of the blade (50) for compressing adjacent portions (19A, 19B) of a transversal zone of glue (19) in step relation to cutting, by said blade (50), of the transversal strip (19) in order to separate the two portions (19A, 19B).

8.(Withdrawn) A package obtained by the method of claim 1, including an article wrapped in a sheet (6) of plastic material having crosswise ends

(19A, 19B) closed by strips of glue (19) and longitudinal edges of the sheet also joined to each other by means of a strip of glue (18).

9.(Withdrawn) A package as in claim 8, wherein a strip of glue (19) is present at each crosswise end (19A, 19B) between the upper and lower portions of the sheet (6) wrapped in tubular form around the article.

10.(Withdrawn) A package as in claim 8, wherein a strip of glue (18) is present between longitudinal overlapped edges of sheet (6) wrapped in tubular form around the article.

11.(New) A method for packaging articles with a thin, flexible film of plastic material comprising the following steps:

- providing a protective plastic film wound onto a bobbin;
- drawing the plastic film from the bobbin to form a band of plastic film;
- continuously feeding the band of plastic film (6) along a vertical path defined between deflecting rollers and towards a conveying means (5),
- applying at least one strip of glue (18) along a longitudinal edge of said band of plastic film (6) during the feeding of the band along the vertical path towards the conveying means;
- applying at least one series of zones of glue (19), regularly spaced apart, crosswise to said band of plastic film (6) during the feeding of the band along the vertical path towards the conveying means, to form transversal zones of glue (19) delimited by side portions (19A, 19B) crosswise and regularly spaced apart on the band;

- after the application of the glue, continuously feeding the band of plastic film with the glue applied to the conveying means;
- orderly transferring a series of articles (2) to be packaged to said conveying means (5), above said band of plastic film (6) with the glue applied which is continuously supplied to the conveying means (5), respectively in positions delimited between said transversal zones of glue (19);
- folding longitudinal edges of said band of plastic film (6) over said articles to assume a tubular form around the articles (2) being packaged, overlapping said longitudinal edges of said band of plastic film (6), with said longitudinal strip of glue (18) remaining between said opposite edges of the band (6);
- joining said edges of the band of plastic film (6) along said longitudinal strip of glue (18) and joining said transversal zones of glue (19);
- pressing said overlapped longitudinal edges of the band in correspondence of the longitudinal strip of glue for stabilizing the longitudinal joining of the longitudinal edges;
- pressing over the side portions (19A, 19B) of the transversal zones of glue (19) using two presser elements (60A, 60B) carried by a rotating roller (13A) rotating above the band for stabilizing the crosswise joining of the side portions (19A, 19B) and, at the same time said side portions (19A, 19B) are being pressed by said two presser elements (60A, 60B),
- crosswise cutting an area of said band of plastic film (6) situated between the pressed side portions (19A, 19B) of the transversal zones of glue (19) using a blade (50) carried by said rotating roller (13A) located between the two presser elements (60A, 60B), in order to cut the thin, flexible film without forming wrinkles and thereby to obtain single packages of articles (2).